



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,710	09/26/2005	Toshio Nomura	1152-0325PUS-1	4015
2292 7590 03/06/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER NGUYEN, KIMBINH T				
ART UNIT 2628		PAPER NUMBER		
NOTIFICATION DATE 03/06/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/550,710

Applicant(s)

NOMURA ET AL.

Examiner

Kimbhinh T. Nguyen

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 02/18/2009 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 02/18/2009 was filed after the mailing date of the Notice of Allowance on 12/16/2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. Figures 16, 17a, 17b, 18a, 18b, 18c, 39a and 39b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uomori et al. 6,268,880 in view of Mori 6,507,358.

Claim 1, Uomori et al. discloses a primary image creator (camera) for creating a primary image of image information for multiple viewpoints (3D structural information describing a 3D shape of an object, generates a plurality of 2D projection models as viewed from a plurality of viewpoints; abstract); Uomori does not teach a thumbnail image creator for creating a thumbnail image; Mori teaches a thumbnail image creator (a multi-lens image pickup apparatus) for creating a thumbnail image (a thumbnail image corresponding to the stereoscopic or panoramic image; col. 3, line 63 through col. 4, line 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a thumbnail image creator taught by Mori into the system of Uomori for providing thumbnail image or stereoscopic image, because it would provide a multi-lens image pickup apparatus capable of synthesizing plural images respectively pickup with the plural image pickup system thereby displaying a

stereoscopic image or a panoramic image on the image display means; col. 3, line 63 through col. 4, line 2); Uomori teaches a 3-dimensional control information creator for creating 3-dimensional control information for implementing 3-dimensional display of the primary image (col. 1, lines 22-57; figs. 10, 11A, 11B and 12A); and a multiplexer (a stereoscopic TV apparatus (A CRT; figs. 16-8) for multiplexing the primary image, the thumbnail image and the 3-dimensional control information (col. 19, line 25 through col. 20, line 63).

Claim 3, Uomori et al. discloses the thumbnail image creator creates the thumbnail image by extracting a section of one viewpoint image from the primary image (col. 5, lines 10-19).

Claim 2, Mori discloses the thumbnail image creator creates the thumbnail image by directly reducing the primary image (col. 5, lines 64-67; col. 14, lines 38-40).

Claim 4, Mori discloses the thumbnail image creator embeds a symbol that indicates an inclusion of a 3-dimensional image into the thumbnail image (col. 6, lines 8-10; figs. 4a-4c).

Claim 5, Mori discloses the thumbnail image creator creates the thumbnail image made up of a reduced image of the primary image and a reduced image of one viewpoint image extracted from the primary image (col. 5, line 64 through col. 6, line 10) and fitted therein in a picture-in-picture manner (col. 6, lines 60-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a thumbnail image creator taught by Mori into the system of Uomori for providing thumbnail image or stereoscopic image, because it would provide

a multi-lens image pickup apparatus capable of synthesizing plural images respectively pickup with the plural image pickup system thereby displaying a stereoscopic image or a panoramic image on the image display means; col. 3, line 63 through col. 4, line 2).

Claim 24, Uomori et al. discloses a primary image creator (camera) for creating a primary image of image information for multiple viewpoints (3D structural information describing a 3D shape of an object, generates a plurality of 2D projection models as viewed from a plurality of viewpoints; abstract); Uomori does not teach a thumbnail image creator for creating a thumbnail image; Mori teaches a thumbnail image creator (a multi-lens image pickup apparatus) for creating a thumbnail image (a thumbnail image corresponding to the stereoscopic or panoramic image; col. 3, line 63 through col. 4, line 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a thumbnail image creator taught by Mori into the system of Uomori for providing thumbnail image or stereoscopic image, because it would provide a multi-lens image pickup apparatus capable of synthesizing plural images respectively pickup with the plural image pickup system thereby displaying a stereoscopic image or a panoramic image on the image display means; col. 3, line 63 through col. 4, line 2); Uomori teaches a 3-dimensional control information creator for creating 3-dimensional control information for implementing 3-dimensional display of the primary image (col. 1, lines 22-57; figs. 10, 11A, 11B and 12A); and a multiplexer (a stereoscopic TV apparatus (A CRT; figs. 16-8) for multiplexing the primary image, the thumbnail image and the 3-dimensional control information (col. 19, line 25 through col. 20, line 63).

Claim 25, the rationale provided in the rejection of claim 2 is incorporated herein.

Claim 26, the rationale provided in the rejection of claim 3 is incorporated herein.

Claim 27, the rationale provided in the rejection of claim 4 is incorporated herein.

Claim 28, the rationale provided in the rejection of claim 5 is incorporated herein.

Claim 29, Uomori discloses the 3-dimensional control information includes the number of viewpoints (abstract), the image placement order the image placement mode, 2D select, and the presence or absence of joining and reduction (col. 1, lines 22-57; figs. 10, 11A, 11B and 12A).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uomori et al. 6,268,880 in view of Yano 7,113,634.

Claim 6, Uomori et al. discloses a demultiplexer for separating a primary image data, a thumbnail data and a 3-dimensional control information from an input image data (col. 17, lines 5-10; col. 19, lines 6-18); the combination does not teach a thumbnail creator for outputting a thumbnail with a symbol that indicates an inclusion of a 3-dimensional image overlaid on the thumbnail data when the primary image data represents a 3-dimensional image; however, Yano teaches outputting a thumbnail with a symbol that indicates an inclusion of a 3-dimensional image overlaid on the thumbnail data when the primary image data represents a 3-dimensional image (col. 2, lines 23-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the stereoscopic forming system taught by Yano into the system of Uomori for creating stereoscopic image, because superposing the optical

member on the printed stereoscopic image, it would reduce the image memory capability and the time required for synthesizing a 3D image (col. 2, lines 7-8).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached at (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kimbinh T. Nguyen/

Primary Examiner, Art Unit 2628

